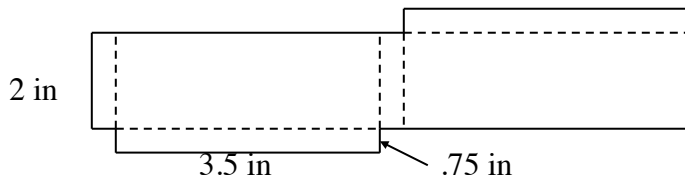


**For each question, you need to find the answer and show your work. Each problem is worth 3 points: one for the correct answer and two for showing your work. For some problems, you may just need to write out how you know you have the correct answer.**

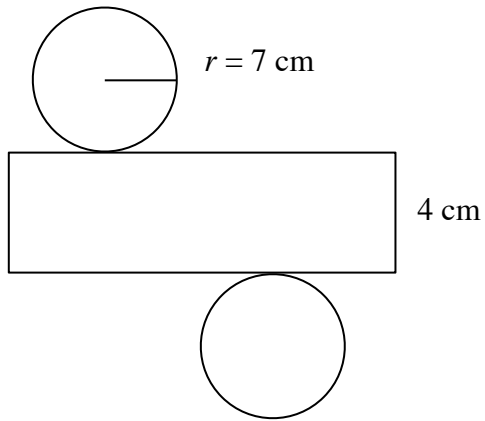
1. A cylinder has a base radius of 8 cm and a height of 13 cm. Draw a picture and find the surface area to the nearest square centimeter.

2. A square pyramid has the following dimensions: Length of a base edge = 12 in and slant height = 16 in. Find the surface area of the pyramid.

3. Find the surface area.



4. Find the surface area to the nearest tenth.



5. The radius of a baseball is 2.75 inches. What is the surface area of a baseball to the nearest tenth of a square inch?

6. The length of each side of a cube is 9 cm. What is the surface area of the cube?

7. A sculpture in the shape of a cube has surface area of  $1176 \text{ cm}^2$ . What is the length of an edge of the cube?

8. Find the surface area of a square pyramid with base edge of 5 ft and slant height of 10 ft.

9. A cone has a radius of 9 inches and a slant height of 13 inches. To the nearest thousandth, what is the surface area of the cone?

**Open-Ended Question: Answer the following question on a separate piece of paper. Make sure as you answer the open-ended question that you show your work AND explain how you know you are doing the correct work. YOU MUST EXPLAIN WHAT YOU ARE DOING!!!**

The surface area of a cube is  $150 \text{ in}^2$ .

A. What is the length of each side?

B. If the length of each side is tripled, how does this change the surface area?